

## **EXHIBIT D**

&lt; Analysis Report 1 &gt; &lt; Attachment 4 &gt;

**Kaneka**

KANEKA CORPORATION

2-3-18, Nakanoshima, Kita-ku, Osaka 530-8288, JAPAN

Tel: +81-6-6226-5403 Fax: +81-6-6226-5059

December 25, 2020

**Analysis report of Designs for health QH soft capsule****Abbreviation**

QH : Ubiquinol-10

RQ9 : Ubiquinol-9

CoQ10 : Ubiquinone-10

RQ11 : Ubiquinol-11

**Analysis sample**

Designs for health QH soft capsule

Product name : CoQNOL™ 200

Manufacturer : Designs for health

Lot Number : L02148

QH content : 200 mg/capsule (labelled content)

**Analytical items****1. QH content, CoQ10 content, QH ratio (HPLC)**

QH Reverse phase HPLC analysis was performed at the laboratory of Pharma & Supplemental Nutrition SV Quality Management team to check the general quality of the Designs for health QH soft capsule.

**2. RQ9, RQ11 content (LC-MS/MS)**

LC-MS/MS analysis was performed at Kaneka Techno Research Corporation to determine the RQ9 content and RQ11 content in the Designs for health QH soft capsule.

**3. 13C stable isotope ratio analysis**

13C stable isotope ratio analysis was performed at Kaneka Techno Research Corporation to identify the origin of QH used for the Designs for health QH soft capsule. The 13C stable isotope ratio is different depending on the carbon source of the target substances.

**Results****1. QH content, CoQ10 content, and QH ratio (HPLC)**

The results of the quantitative analysis are shown in Table 1.

Table 1 Results of the quantitative analysis

	QH content (mg/capsule)	CoQ10 content (mg/capsule)	QH + CoQ10 (mg/capsule)	QH ratio (%)
1	225.98	0.65	226.63	99.7
2	221.81	0.70	222.51	99.7
3	219.05	0.74	219.80	99.7
<b>Mean</b>	<b>222.3</b>	<b>0.7</b>	<b>223.0</b>	<b>99.7</b>
<b>SD</b>	<b>3.49</b>	<b>0.05</b>	<b>3.44</b>	<b>0.03</b>
<b>%RSD</b>	<b>1.57</b>	<b>6.93</b>	<b>1.54</b>	<b>0.03</b>

QH ratio (%) = QH content / (QH content + CoQ10 content) x 100

**KANEKA CORPORATION**

2-3-18, Nakanoshima, Kita-ku, Osaka 530-8288, JAPAN

Tel: +81-6-6226-5403 Fax : +81-6-6226-5059

**2. RQ9 content and RQ11 content (LC-MS/MS)**

The RQ9 content and RQ11 content of the Designs for health QH soft capsule were quantified by LC-MS/MS analysis, and the analysis results are shown in Table 2. The analysis result showed both of components were contained in the capsule product.

Table 2 RQ9 content and RQ11 content of the Designs for health QH soft capsule.

Product name	RQ9 content ( $\mu\text{g}/\text{capsule}$ )	RQ11 content <sup>(a)</sup> ( $\mu\text{g}/\text{capsule}$ )
Designs for health QH soft capsule	490	88

(a) RQ11 content was calculated by using the calibration curve of RQ9

**3.  $^{13}\text{C}$  stable isotope ratio analysis**

The  $^{13}\text{C}$  stable isotope ratio analysis results are shown in Table 3, and the  $^{13}\text{C}$  stable isotope ratio distribution map including the result of the Designs for health QH soft capsule is shown in Figure 1.

The analytical data showed that the  $\text{C}13$  value in the analytical sample would be very close to Ubidecarenone Kaneka. Considering the  $\text{C}13$  values of China CoQ10s, Kaneka CoQ10 would be used for production of the Design for health QH product. Because only Kaneka CoQ10 and China CoQ10s are available in the market.

Table 3 Results of  $^{13}\text{C}$  stable isotope ratio analysis

Product name	$\delta^{13}\text{C}\text{-VPDB}(\text{‰})$
Designs for health QH soft capsule	-8.04
UBIDECARENONE KANEKA (Lot. FA01-4246)	-8.70

**KANEKA** KANEKA CORPORATION  
 2-3-18, Nakanoshima, Kita-ku, Osaka 530-8288, JAPAN  
 Tel: +81-6-6226-5403 Fax : +81-6-6226-5059

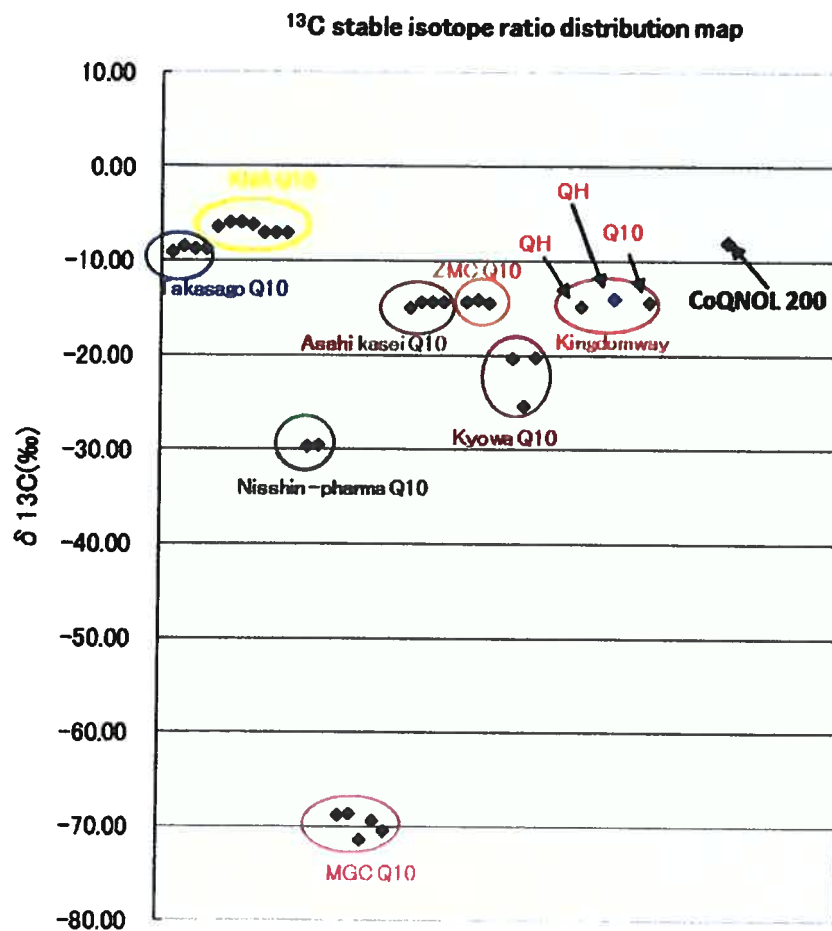


Figure 1 <sup>13</sup>C stable ratio distribution map

**Kaneka**

January 6, 2021

Research & Scientific Affairs Team  
Supplement Business Division  
Pharma & Supplemental Nutrition SV

**ANALYSIS REPORT 2**

---

Product name : CoQNOL200 (Designs for Health)

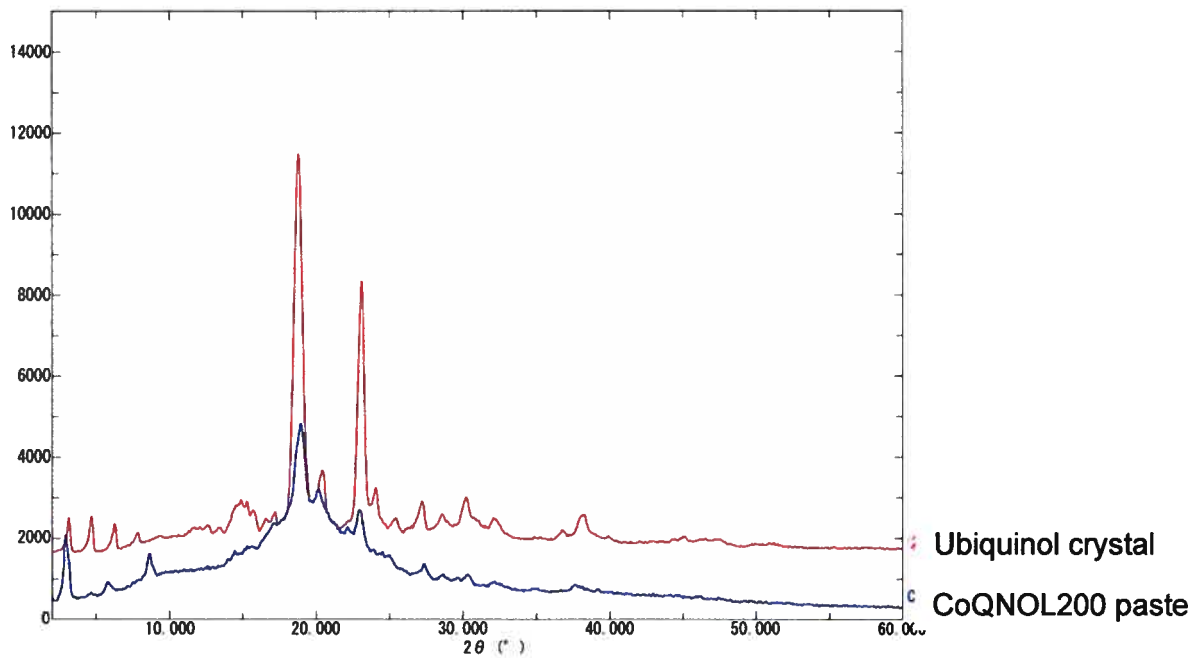
Lot No. : 02148

---

**1. Appearance**



## 2. X - ray diffraction of CoQNOL200 capsule contents (paste)



## 3. Isolation of crystal from CoQNOL200 capsule

Capsule contents (paste)



Disperse in water by sonication



Centrifugation



Precipitate



Wash precipitate by water

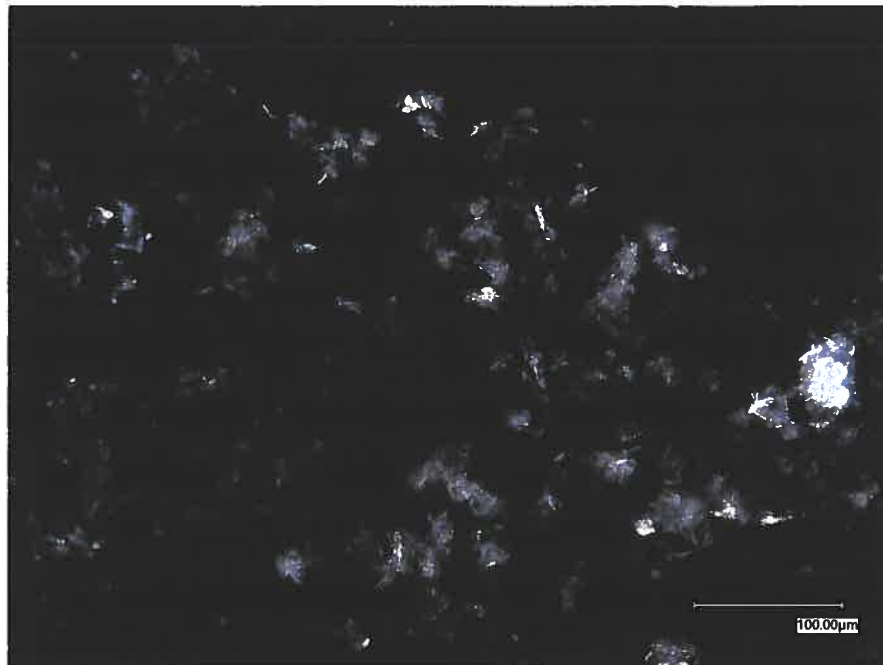


Precipitate

- a) Microscopic observation
- b) HPLC analysis
- c) X - ray diffraction
- d) Leave at air atmosphere for 20days

### 3-1. Results

#### a) Microscopic observation

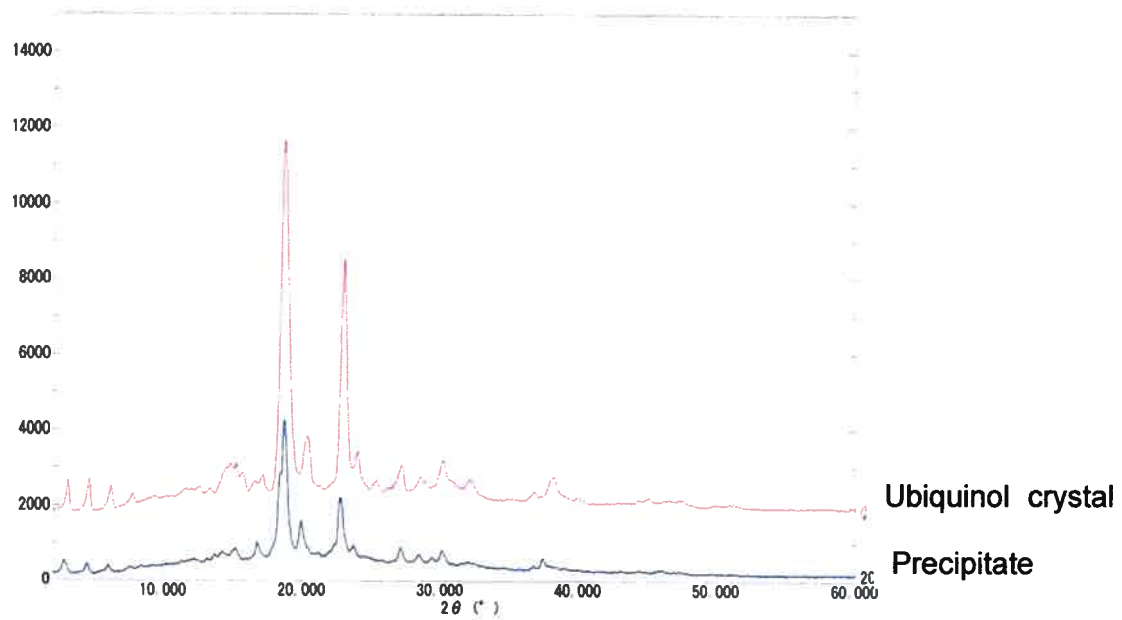


#### b) HPLC analysis

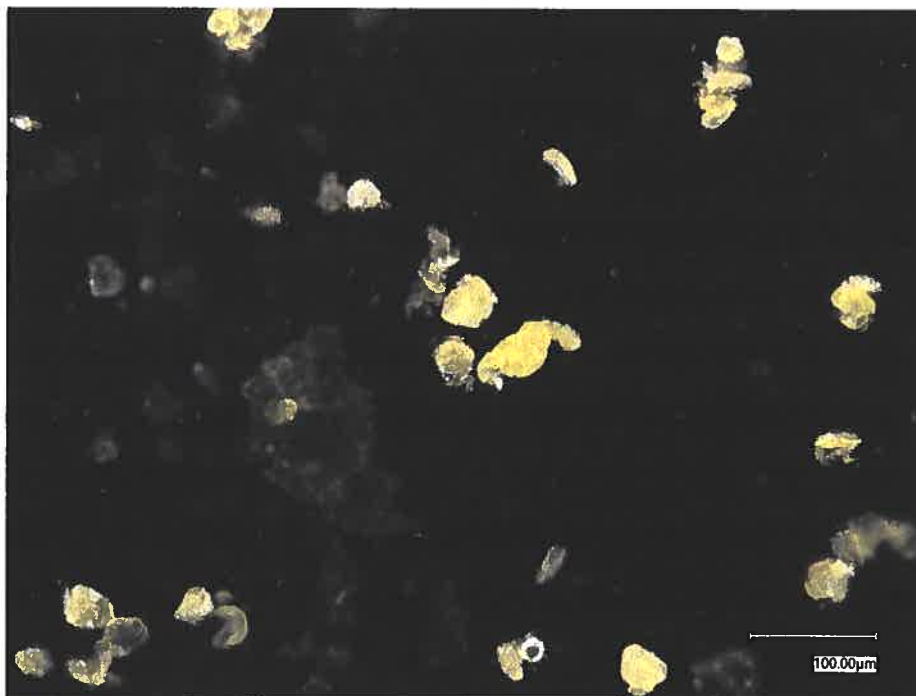
Ubiquinol content (w/w%)	Ubiquinone content (w/w%)	Ubiquinol ratio* (%)
81.8	0.6	99.3

$$\text{* Ubiquinol ratio(\%)} = \frac{\text{Ubiquinol content}}{\text{Ubiquinol} + \text{Ubiquinone content}} \times 100$$

c) X - ray diffraction



d) Microscopic observation of precipitate (air atmosphere)

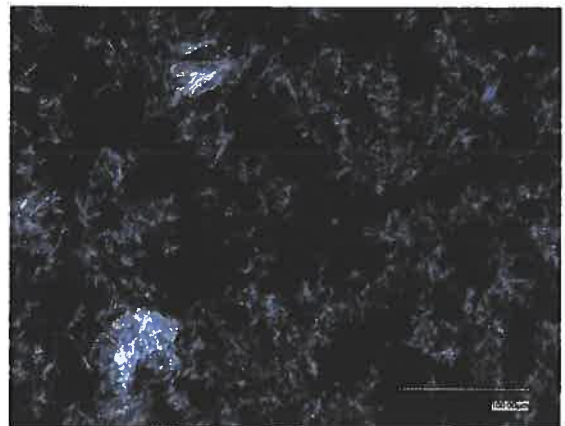




#### 4. Microscopic observation of CoQNOL200 capsule contents (paste)



Capsule contents disperse in MCT



Capsule contents disperse in  
MCT saturated with ubiquinol

#### 4-1. Isolation of crystal from CoQNOL200 capsule

Capsule contents (paste)



Disperse in MCT saturated with ubiquinol

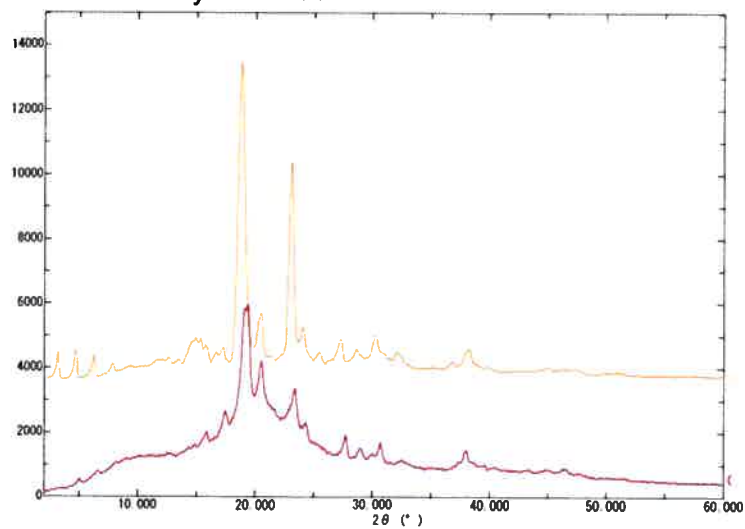


Centrifugation



Precipitate

X - ray diffraction



Ubiquinol crystal

Precipitate

**KANeka**

January 25, 2021

Research & Scientific Affairs Team  
Supplement Business Division  
Pharma & Supplemental Nutrition SV

**ANALYSIS REPORT-3**

---

Product name : CoQNOL200 (Designs for Health)

Lot No. : 02148

---

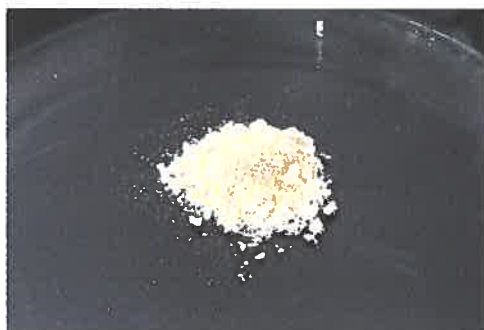
**1. Appearance**



## 2. Isolation of crystal from CoQNOL200 capsule

Capsule contents (paste)  
↓  
Disperse in water by sonication  
↓  
Centrifugation  
↓  
Precipitate  
↓  
Wash precipitate by water  
↓  
Precipitate  
(Leave at air atmosphere for 7 days)

Appearance photo



0 days



7 days